

## 2. Provisioning Of The Local Loop

At the outset, the Commission should clarify that, while ILECs are required to provide unbundled local loops to competitive carriers, ILECs are not required to provide assurances that such carriers will be able to provide DSL service to consumers over those loops. Loop characteristics vary greatly, and the quality of a provider's DSL service may be adversely affected by a number of factors, including interaction of loop characteristics (length, gauge, insulation, etc.) with a particular vendor's equipment. For DSL service, a primary factor may be distance. DSL service is generally not feasible when the length of the local loop exceeds 18,000 feet.<sup>107</sup> Depending on the type of DSL technology employed, that figure may be considerably less.<sup>108</sup> Similarly, even if an ILEC can provide DSL service over a particular loop, a competitor may not be able to provide another DSL service because of the differences in technology. Thus, the Commission should not presume that the inability of a competitor to provide DSL service over a loop is the result of discriminatory access on the part of the ILEC.

Similarly, the Commission should not require ILECs to compile comprehensive information about local loop conditions or the ability of a particular loop to handle DSL service.<sup>109</sup> Large ILECs such as BellSouth have literally millions of loops across their regions. Compiling information about loop conditions could take years and the expenditure of an enormous amount of resources. Moreover, such information would almost never be reliable. Changes to loop conditions occur constantly, and attempting to keep track of loop information

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<sup>107</sup> BellSouth's ADSL service is designed to operate at distances of less than 18,000 feet.

<sup>108</sup> For example, high-rate DSL service generally is limited to distances of less than 12,000 feet.

<sup>109</sup> *Id.* at ¶ 157.

that competitors might desire would be an administrative nightmare. Of course, to the extent BellSouth has compiled such information, it will be made available to competitors upon request. The Commission should not, however, force ILECs to gather information about the local loop that they would not otherwise gather and that another carrier may never request.

### 3. Sub-Loop Unbundling And Collocation At The Remote Terminal

In the *Notice*, the Commission proposes to require ILECs to provide competitive DSL service providers with access to sub-loop elements and access to collocation in remote terminals.<sup>110</sup> While a DLC-delivered loop can transport the DSL's voice channel to the central office, currently installed DLC systems themselves cannot transport the DSL packet data channels.<sup>111</sup> Sub-loop unbundling might enable CLECs to provide DSL services utilizing their own high speed digital facilities to the remote terminal or, alternately, using unbundled high speed facilities where ILEC remote terminal access to high speed digital facilities is available or could be built for transport between the sub-loop and the central office. The Commission should not attempt to prescribe a rule to address this situation, but should continue to leave the issue of sub-loop unbundling to negotiation and, if necessary, arbitration by state commissions. This statutorily prescribed process is uniquely capable of addressing the specific facts of a competitive carrier's unbundling request, while national rulemaking is not.

BellSouth vigorously opposes the Commission's proposal to require ILECs to allow collocation in remote terminals. In the *Notice*, the Commission proposes that ILECs allow

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<sup>110</sup> *Id.* at ¶¶ 167-176

<sup>111</sup> Although the Commission stated in the *Local Competition Order* that it would be technically feasible to unbundle loops that passed through a DLC system or other remote terminal, that statement is correct only for voice channels. *See id.* at ¶¶ 54, 153 (citing *Local Competition Order*, 11 FCC Rcd at 15692, ¶ 383).

remote terminal collocation unless the ILEC can prove that “with respect to a particular remote terminal . . . there is insufficient space . . . to accommodate the requesting carrier.”<sup>112</sup> In most remote terminals, space is quite limited, and ILECs often will be required to deny requests for remote terminal collocation. Additionally, DLC cabinets have severe power and heat dissipation limitations, which could require denial of collocation requests even if space were available. Requiring ILECs to prove in each case that denial of collocation in remote terminals was proper would impose an enormous burden on ILECs without increasing significantly the level of access that competitors obtain.

Moreover, collocation in remote terminals is unnecessary. BellSouth has been able to successfully negotiate agreements that provide competitors access to sub-loop elements without providing collocation at the remote terminals. Instead of collocation, a cross-box to cross-box interconnection arrangement is the established method of providing competitors with full access to all necessary sub-loop elements. Not only is this solution technically feasible, but it has the additional advantage of allowing the competitor to access the unbundled network elements that it has obtained without compromising the security or integrity of its (or the ILEC's) network. Moreover, because the competitor would be utilizing its own DSL equipment within its own housing, the competitor would have greater control over the technical characteristics of the DSL service it offers.

BellSouth opposes the Commission's proposal to require ILECs to provide alternatives to sub-loop unbundling and remote terminal collocation at no extra cost to the

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<sup>112</sup> *Id.* at ¶ 174.

requesting carrier.<sup>113</sup> Section 252(d) specifically requires that ILECs receive compensation from requesting carriers based on the cost of providing an unbundled network element. Requiring ILECs to provide carriers with additional alternatives at no extra cost expressly violates Section 252(d) because it would require ILECs to grant carriers additional elements without compensation. In effect, this proposal requires ILECs to subsidize their competitor's entry into the local market. Not only would this proposal distort the competitive advanced services market, it would constitute an attempt to regulate the pricing of unbundled network elements, which is not within the Commission's jurisdiction.<sup>114</sup> The Commission's proposal is neither necessary to promote competition in advanced services nor valid under the Act, and it should be rejected.

#### 4. Spectrum Unbundling And Management Issues

In the *Notice*, the Commission proposes to address spectrum interference issues related to the transmission of voice and DSL data signals over the same local loop.<sup>115</sup> The *Notice* does not properly distinguish between two separate issues: spectrum management and spectrum unbundling. On the one hand, spectrum management is concerned with limiting noise (*i.e.*, crosstalk) between different loops within a cable sheath. This noise is typically caused by multiple systems, which transmit on different frequencies, being connected to different loops. For example, spectrum management is employed to ensure that data being carried over one loop does not interfere with voice that is being carried over a different loop within the same cable sheath. Spectrum unbundling, on the other hand, refers to the idea of two or more service

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<sup>113</sup> *Notice* at ¶ 173.

<sup>114</sup> *See Iowa Utils. Bd.*, 120 F.3d at 793-800.

<sup>115</sup> *Id.* at ¶ 159.

providers using the same loop to transport different services. Thus, spectrum management and spectrum unbundling are completely separate concepts.

Spectrum management is critical as new systems are deployed using advanced technologies. Fortunately, spectrum management is not new to the industry and efforts have been made to develop proper standards to address this issue. The Commission accordingly should rely on standard-setting bodies, such as ATIS Committee T1, to set guidelines for loop spectrum management.

Spectrum unbundling, however, is a new concept, and one of great concern to BellSouth. As discussed previously, advanced services, such as ADSL, are in their infancy. Providers, including BellSouth, are just beginning to offer such services. While BellSouth's deployment has been very successful from an engineering standpoint, there has been no time to develop universal standards to govern provision and maintenance of such services. In such situations, it is extremely important that the services provided over the loop, both voice and data, are engineered and controlled by the same provider to ensure proper quality to the end user. If the Commission permits a competitor to obtain loop elements for the purpose of providing advanced services only, the underlying voice carrier may be adversely affected by interference caused by incompatible technology. The cause of the interference would be transparent to the subscriber, who would erroneously attribute the reduction in quality to inferior service by the voice carrier. Only by maintaining the requirement that a competitor purchase the loop element as a facility and not as a function can the Commission ensure that accountability over loop quality is adequately maintained.

Moreover, BellSouth does not have any point on its network at which the loop can be unbundled to allow the data portion of the spectrum to go to another carrier while allowing

BellSouth to keep only the voice portion. Accordingly, the Commission cannot, and should not, attempt to force BellSouth, or any other ILEC that has a similar network configuration, to reconstruct its network to allow the loop spectrum to be unbundled.

Finally, and most importantly, the Commission has recognized spectrum unbundling as being completely inappropriate. Indeed, in the *Local Competition Order*, the Commission considered and expressly rejected the concept of spectrum unbundling. The Commission explicitly stated:

We decline to define a loop element in functional terms rather than in terms of the facility itself. Some parties advocate defining a loop element as merely a functional piece of shared facility, similar to capacity purchased on a shared transport trunk [(i.e. spectrum unbundling)] . . . . While such a definition, based on the types of traffic provided over a facility, may allow for the separation of costs for a facility dedicated to one end user, we conclude that such treatment is inappropriate. *Giving competing providers exclusive control over network facilities dedicated to particular end users provides such carriers maximum flexibility to offer new services to such end users.* In contrast, a definition of a loop element that allows simultaneous access to the loop facility would preclude the provision of certain services in favor of others.<sup>116</sup>

Advanced services are exactly the types of “new services” the Commission referred to in making its decision in the *Local Competition Order* above. The Commission cannot now arbitrarily pick and choose the types of new services for which it will and will not require spectrum unbundling. Nothing has changed since the issuance of *Local Competition Order*. Accordingly, the Commission should follow its own clear precedent and not require ILECs to engage in spectrum unbundling for advanced services.

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<sup>116</sup> See *Local Competition Order*, 111 FCC Rcd at 15693, ¶ 385.

## 5. Attachment Of Equipment

In the *Notice*, the Commission proposes to allow competitors to attach equipment that does not satisfy Bellcore Network Equipment and Building Specifications ("NEBS") requirements if the ILEC uses non-NEBS-compliant equipment.<sup>117</sup> Under this proposal, a competitor would not only be able to attach the "same" equipment that the ILEC uses, but also "equivalent" equipment.<sup>118</sup> BellSouth urges the Commission to modify this proposed rule to allow ILECs to reject the attachment of any equipment on grounds of technical incompatibility if such equipment is either not NEBS compliant or not exactly the same as equipment that the ILEC uses. Protection of the network is vital to ensuring that ILECs and their competitors are able to provide uninterrupted service to consumers. ILECs must retain the ability to reject the attachment of any equipment that they determine may cause harm to the network without becoming entrenched in a dispute about whether a particular variation from equipment that an ILEC uses is significant enough to render such equipment "non-equivalent."

BellSouth supports attempts to create a standard that would facilitate the attachment of equipment at the central office end of the loop. Such uniform standards would facilitate the interconnection of equipment belonging to various competitors and thereby promote competition in advanced services. The Commission must exercise caution, however, to ensure that it does not inadvertently discourage innovation in equipment design. Rather than establish the standard itself, the Commission should allow public standard setting bodies, such as

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*Notice* at ¶ 134.

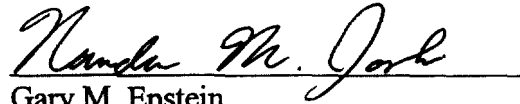
Committee T1 to develop the necessary standards for connection of equipment in the central office.

## **VIII. CONCLUSION**

The emerging mass market for advanced services is a shining example of the innovation that can occur when the Commission permits competition to flourish. Explosive consumer demand for advanced telecommunications capabilities has caused firms from across traditional industry lines to develop innovative technologies to bring those capabilities to an ever greater number of people. The question in this proceeding is not whether advanced services will be deployed, but how quickly will they be deployed to "all Americans," as Congress intended. Congress believed that such deployment would occur most rapidly if the Commission used its authority to remove regulatory "barriers to infrastructure investment." The Commission has an opportunity to further the process of removing those barriers in this proceeding, by adopting a regulatory policy that allows ILECs to compete freely and equally with its advanced services competitors. Just as competition drove the investment in technology that helped create the advanced services market, competition will ensure that it continues to flourish. More intense regulation, as proposed in the *Notice*, will stifle competition and investment. The losers will be consumers and the American economy.



Respectfully submitted,

A handwritten signature in cursive script, reading "Nandan M. Joshi", is written over a horizontal line.

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